CURRICULUM VITAE

Dr. MAHAMUDA SHAIK
Associate Professor
Department of Physics
K L University
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Personal:

Gender	**:**	Female
Marital Status	**:**	Married
Date of Birth	**:**	27th August 1983
Nationality	**:**	INDIAN

Professional:

Research Areas	**:**	Synthesis and Characterization of Rare Earth doped Glasses, Optical/Fluorescent Spectroscopy, Solid State Physics, Materials Science.
Keywords	**:**	Inorganic materials, Optical/Fluorescence Properties, Rare earths, Glasses, Phosphors and Nanophosphors for W-LEDs

Educational Qualifications:

Ph.D	**2015**	**Physics** **(Title:** Spectroscopic Studies & Lasing potentialities of Nd^{3+}, Pr^{3+}, Ho^{3+} ions doped Zinc Alumino Bismuth Borate and Dy^{3+}, Sm^{3+} ions doped Oxy-fluoroborate glasses) **(K L University, Guntur Dt., Andhra Pradesh)**	
M.Phil	**2010**	**Physics** **(Title:** Synthesis and Characterization of Sr_2CeO_4 Phosphor: Combustion Method**)** **(Acharya Nagarjuna University, Guntur Dt., Andhra Pradesh)**	**A**

M.Sc	**2006**	**Physics** **(Acharya Nagarjuna University, Guntur Dt., Andhra Pradesh)**	**80%**
B.Sc	**2003**	**M P C** **(Acharya Nagarjuna University, Guntur Dt., Andhra Pradesh)**	**85%**
Intemediate	**2000**	**M P C** **(SDIM College, Tenali, Guntur Dt., Andhra Pradesh)**	**80%**
10th lass	**1998**	**General** **(SDIM School, Tenali, Guntur Dt., Andhra Pradesh)**	**83%**

Awards & Achievements

2016	Early Career Research Award	DST-SERB under ECRA scheme
2015	Young Women Achiever's Award	Venus International Foundation (VIWA-2016), Chennai
2012	Woman Scientist (WOS-A)	DST under Woman Scientist Scheme, Govt. of India, New Delhi
2006	University 2nd Rank **(M.Sc)**	Acharya Nagarjuna University, Nagarjuna Nagar, Guntur (Dt.), Andhra Pradesh.
2003	University 1st Rank **(B.Sc)**	Acharya Nagarjuna University, Nagarjuna Nagar, Guntur (Dt.), Andhra Pradesh.
2003	Pratibha Puraskaram for scoring highest marks in Physics	V SR & N V R College, Tenali, Guntur (Dt.), Andhra Pradesh.
	Pratibha Puraskaram for scoring highest marks in Course	V SR & N V R College, Tenali, Guntur (Dt.), Andhra Pradesh.
2002	Pratibha Puraskaram for scoring highest marks in Course	V SR & N V R College, Tenali, Guntur (Dt.), Andhra Pradesh.
1998	District first in Talent Test	Lion's Club Association, Tenali, Guntur (Dt.), Andhra Pradesh.

Academic/ Research Experiences (10 Years 6 Months)

⇒ Feb 2017 – till date	**Associate Professor,** Department of Physics, K L University, Vaddeswaram, Guntur (Dt.), Andhra Pradesh.
⇒ July 2015 – Jan 2017	**Assistant Professor,** Department of Physics, K L University, Vaddeswaram, Guntur (Dt.), Andhra Pradesh.
⇒ Aug 2012 – June 2015	**Woman Scientist (DST/WOS-A)**, Department of Physics, K L University, Vaddeswaram, Guntur (Dt.), Andhra Pradesh.
⇒ June 2007 – July 2012	**Assistant Professor,** Department of Physics, K L University, Vaddeswaram, Guntur (Dt.), Andhra Pradesh.
⇒ July 2006 – April 2007	**Lecturer**, Department of Physics, VSR & NVR College, Tenali, Andhra Pradesh.

Membership in Scientific Societies:

◇ **Life member** – Luminescence Society of India (LSI)

Research Expertise:

⇨ Expertise in analyzing FT-IR, Fluorescence, Absorption, Lifetime techniques.

⇨ Expertise in preparing Photonic glasses and glass ceramics (Luminescent materials)

Ongoing/Completed Research Projects:

Project Title	Funding Agency	Cost	Period	Remarks
Spectral Studies of Neodymium doped glasses and glassy ceramics for efficient laser action.	DST (WOS-A), Govt. of India, New Delhi	14.98 lakhs	3 Years	Completed (Principal Investigator)
Preparation and Characterization of Rare Earth ions doped Oxide, Fluoride and Oxy-fluoride Glasses/Glassy Ceramics for Fiber Lasers and Optical Fiber Amplifiers	DST- SERB under ECRA Scheme, Govt. of India, New Delhi	52 lakhs	3 Years	Ongoing (Principal Investigator)

Research Guidance:

Degree	Student Name	Title of Thesis	Year of Degree Awarded
Ph.D	G. Murali Krishna	Absorption and Luminescence Spectral studies of rare earth ions doped glasses	In progress
Ph.D	P. Sailaja	Spectroscopic studies of rare earth ions doped glasses	In progress
JRF	Rupesh Talewar	Preparation and Characterization of Rare Earth ions doped Oxide, Fluoride and Oxy-fluoride Glasses/Glassy Ceramics for Fiber Lasers and Optical Fiber Amplifiers	DST-SERB Project

Guest Lecturers / Panel Member / Reviewer:

1. Delivered a guest lecture on **"LASERS & APPLICATIONS"** on 05-01-2013 in the Department of Physics. V.S.R & N.V.R College, Tenali, Guntur (Dt.), A.P.
2. Member of a BOS Committee in the Department of Physics, V.S.R & N.V.R College, Tenali, Guntur (Dt.), A.P.
3. Reviewer for the Journal Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

Research Publications (International Journals):

1. **Spectroscopic studies of Pr^{3+} doped lithium lead alumino borateglasses for visible reddish orange luminescent device applications**.

   Nisha Deopa, A.S. Rao, **Sk. Mahamuda**, Mohini Gupta, M. Jayasimhadri, D. Haranath, G. Vijaya Prakash

   "Journal of Alloys and Compounds" 708 (2017) 911-921 ***(Impact Factor- 3.03)***
2. **Dy^{3+} ions doped single and mixed alkali fluoro tungsten tellurite glasses for LASER and white LED applications**

   Ch. B. Annapurna Devi, **Sk. Mahamuda**, M. Venkateswarlu, K. Swapna, , A. Srinivasa Rao and G. Vijaya Prakash

   "Optical Materials" 62 (2016) 569 – 577 ***(Impact Factor- 2.24)***
3. **Luminescence Spectral Studies of Tm^{3+} ions doped Lead Tungsten Tellurite Glasses For Visible Red and NIR applications**

M. Venkateswarlu, **Sk. Mahamuda**, K. Swapna, , A. Srinivasa Rao, A. Mohan Babu, Suman Shakya and G. Vijaya Prakash

"Journal of Luminescence" 175 (2016) 225-231 ***(Impact Factor- 2.68)***

4. **Holmium doped Lead Tungsten Tellurite Glasses for Green Luminescent Applications**

   M. Venkateswarlu, **Sk. Mahamuda**, K. Swapna, M. V. V. K. S. Prasad, A. Srinivasa Rao, A. Mohan Babu, Suman Shakya and G. Vijaya Prakash

   "Journal of Luminescence" 163 (2015) 64-71 ***(Impact Factor- 2.68)***

5. **Visible, Up-Conversion and NIR (~ 1.5 µm) Luminescence Studies of Er^{3+} doped Zinc Alumino Bismuth Borate Glasses**

   K. Swapna, **Sk. Mahamuda**, M. Venkateswarlu, A. Srinivasa Rao, M. Jayasimhadri, Suman Shakya and G. Vijaya Prakash

   "Journal of Luminescence" 163 (2015) 55-63 ***(Impact Factor-2.68)***

6. **Spectroscopic studies of Nd^{3+} doped Lead Tungstun Tellurite glasses for the NIR emission at 1062nm**

   M. Venkateswarlu, **Sk. Mahamuda**, K. Swapna, M. V. V. K. S. Prasad, A. Srinivasa Rao, A. Mohan Babu, Suman Shakya and G. Vijaya Prakash

   "Optical materials" 39 (2015) 8-15 ***(Impact Factor- 2.24)***

7. **Spectral characterization of Sm^{3+} ions doped Oxy-fluoroborate glasses for visible orange luminescent applications**

   Sk. Mahamuda, K. Swapna, M. Venkateswarlu, A. Srinivasa Rao, Suman Shakya and G. Vijaya Prakash

   "Journal of Luminescence" 154 (2014) 410-424 ***(Impact Factor- 2.68)***

8. **Lasing potentialities and White Light Generation Capabilities of Dy^{3+} doped Oxy-fluoroborate Glasses**

   Sk. Mahamuda, K. Swapna, P. Packiyaraj, A. Srinivasa Rao and G. Vijaya Prakash

   "Journal of Luminescence" 153(2014) 382-392 ***(Impact Factor- 2.68)***

9. **Visible Luminescence characteristics of Sm^{3+} doped Zinc Alumino Bismuth Borate glasses**

   K. Swapna, **Sk. Mahamuda,** A. Srinivasa Rao, T. Sasikala and L. Rama Moorthy

   "Journal of Luminescence" 146 (2014) 288-294 ***(Impact Factor- 2.68)***

10. **Pr^{3+} doped Lead TungstenTellurite Glasses for Visible Red Lasers**

M.Venkateswarlu, M.V.V.K.S.Prasad, K.Swapna, **Sk.Mahamuda**, A. Srinivasa Rao, A. Mohan Babu and D. Haranath

"Ceramics International" 40 (4) (2014) 6261-6269 ***(Impact Factor- 2.64)***

11. **Optical Studies of Sm^{3+} ions doped Zinc Alumino Bismuth Borate Glasses**

    K. Swapna, **Sk. Mahamuda**, A. Srinivasa Rao, S. Shakya, T. Sasikala, D. Haranath and G. Vijaya Prakash

    "Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy" 125 (2014) 53-60 ***(Impact Factor- 2.63)***

12. **Luminescence Characterization of Eu^{3+} doped Zinc Alumino Bismuth Borate Glasses for Visible Red Emission Applications**

    K. Swapna, **Sk. Mahamuda**, A. Srinivasa Rao, P. Packiya Raj, T. Sasikala and L. Rama Moorthy

    "Journal of Luminescence" 156 (2014) 80-86 ***(Impact Factor-2.68)***

13. **Tb^{3+} doped Zinc Alumino Bismuth Borate Glasses for Green Emitting Luminescent Devices**

    K. Swapna, **Sk. Mahamuda**, A. Srinivasa Rao, M. Jayasimhadri, Suman Shakya and G. Vijaya Prakash

    "Journal of Luminescence" 156 (2014) 180-187 ***(Impact Factor-2.68)***

14. **Visible red, NIR and Mid-IR emission studies of Ho^{3+} doped Zinc Alumino Bismuth Borate glasses**

    Sk. Mahamuda, K. Swapna, P. Packiyaraj, A. Srinivasa Rao, G. Vijaya Prakash

    "Optical Materials" 36 (2013) 362-371 ***(Impact Factor- 2.24*****)**

15. **Reddish-Orange emission from Pr^{3+} doped Zinc Alumino Bismuth Borate Glasses**

    Sk. Mahamuda, K. Swapna, A. Srinivasa Rao, T. Sasikala and L.Rama Moorthy

    "Physica B" 428 (2013) 36-42 ***(Impact Factor- 1.41)***

16. **Spectroscopic properties and luminescence behavior of Nd^{3+} doped Zinc Alumino Bismuth Borate glasses**

    Sk. Mahamuda, K. Swapna, A. Srinivasa Rao, M. Jayasimhadri, T. Sasikala, K. Pavani and L.Rama Moorthy

    "The Journal of Physics and Chemistry of Solids" 74 (2013) 1308-1315

    (Impact Factor- 2.01)

17. **Optical absorption and luminescence characteristics of Dy^{3+} doped Zinc Alumino Bismuth Borate glasses for lasing materials and white LEDs**

K. Swapna, **Sk. Mahamuda**, A. Srinivasa Rao, M. Jayasimhadri, T. Sasikala and L. Rama Moorthy

"The Journal of Luminescence" 139 (2013) 119-124 ***(Impact Factor- 2.68)***

18. **Visible fluorescence characteristics of Dy^{3+} doped Zinc Alumino Bismuth Borate glasses for opto electronic devices**

K. Swapna, **Sk. Mahamuda**, A. Srinivasa Rao, M. Jayasimhadri, T. Sasikala and L. Rama Moorthy

"Ceramics International" 39 (2013) 8459-8465 ***(Impact Factor- 2.64)***

19. **Synthesis and characterization of Sr_2CeO_4 phosphor doped with Eu**

B.Walter Ratna Kumar, K.V.R.Murthy, B.Subba Rao and **Mahamuda Shaik**

"International Journal of Science Innovations and Discoveries" ISSN:2249-5347, 1 (2) (2011) 145-150.

Total Number of Citations	**257**
h-index	**11**
i 10-index	**12**

https://scholar.google.co.in/citations?user=2DnsmnEAAAAJ&hl=en

NATIONAL / INTERNATIONAL CONFERENCES / SEMINARS / WORK SHOPS ATTENDED AND PAPER PRESENTATIONS.

1. **Participated in Two weeks** ***"Science Academies Refresher Course in Experimental Physics (SARCEP-2016)"*** sponsored by Indian Academy of Sciences-Bangalore, Indian National Science Academy-New Delhi and The National Academy Sciences-Allahabad, India, during 14^{th} -29^{th} June 2016 held at K L University, Guntur (Dt.), Andhra Pradesh, India

2. **Organized an Inspire camp – 2015** on **16^{th} - 20^{th} December, 2015** sponsored by DST, Govt. of India at K L University, Guntur (Dt.), Andhra Pradesh, India.

3. **Organized an Inspire camp – 2015** on **9^{th} - 13^{th} December, 2015** sponsored by DST, Govt. of India at K L University, Guntur (Dt.), Andhra Pradesh, India.

4. **National Conference on** ***"Emerging Trends of Advanced Functional Materials (NCAFM-2015)"*** held on **3 – 4^{th} September 2015** at Department of Physics**,** K L University, Guntur (Dt.), Andhra Pradesh, India.

5. **Two day National Workshop** on **"*Intellectual property Rights and Scholarly Publishing Tools for Quality Research*"** held on **9^{th} -10^{th} May 2015** organized by the Central Library jointly with R&D Division at K L University, Guntur (Dt.), Andhra Pradesh, India.

6. **Two day National Workshop** on **"*Emerging Trends in Renewable Energy (NWETR-2015)*"** held on **18th -19th March 2015** at the Department of Electrical & Electronics Engineering and Centre for Advanced Energy Studies at K L University, Guntur (Dt.), Andhra Pradesh, India.

7. **5th International Conference on "*Luminescence and its Applications (ICLA-2015)*" held on 9-12th February 2015 at Bangalore, India and presented a paper entitled "Holmium doped Lead Tungsten Tellurite Glasses for Green Luminescent Applications"**

8. **National Seminar** on ***"Multi Functional Materials Synthesis and Applications (MFMSM-2015)"*** held on **23rd & 24th January 2015 at Department of Physics, The Hindu College, Machilipatnam, Krishna (Dt.), Andhra Pradesh, India**

9. **International Conference on *"Frontiers in Nano Science, Technology and Applications (FINSTA-2015)"* held on 20th – 22nd December 2014 at Department of Physics, Sri Satya Sai Institute of Higher Learning Prasanthinilayam, AP, India.**

10. **International Seminar on *"Glasses and other Functional Materials (ISGFM-2014)"* held on 11th – 13th December 2014 at Department of Physics, Acharya Nagarjuna University, AP, India** and presented a paper entitled **"Spectral Charecterization of Sm^{3+} ions doped oxy-fluoroborate glasses for visible orange luminescent applications".**

11. **International Seminar on *"Glasses and other Functional Materials (ISGFM-2014)"* held on 11th – 13th December 2014 at Department of Physics, Acharya Nagarjuna University, AP, India** and presented a paper entitled **"Visible, Up-Conversion and NIR (~ 1.5 µm) Luminescence Studies of Er^{3+} doped Zinc Alumino Bismuth Borate Glasses".**

12. **International Seminar on *"Glasses and other Functional Materials (ISGFM-2014)"* held on 11th – 13th December 2014 at Department of Physics, Acharya Nagarjuna University, AP, India** and presented a paper entitled **"Spectroscopic studies of Nd^{3+} doped Lead Tungsten Tellurite Glasses for the NIR emission at 1062 nm"**.

13. **Winter School on *"Advances in Laser Spectroscopy and Applications" (Under UGC Networking Program)* held on 22nd -28th March 2014 at Department of Physics, Banaras Hindu University (BHU), Varanasi.**

14. **International conference on *"International Union of Materials Research Society – International Conference in Asia (IUMRS-ICA2013)"* held on 16th – 20th December 2013 at IISC Bangalore, India** and presented a paper entitled **"Lasing potentialities and White Light Generation Capabilities of Dy^{3+} doped Oxy-fluoroborate Glasses".**

15. **International conference on *"International Union of Materials Research Society – International Conference in Asia (IUMRS-ICA2013)"* held on 16th – 20th December 2013 at IISC Bangalore, India** and presented a paper entitled **"Luminescence Characterization of Eu^{3+} doped Zinc Alumino Bismuth Borate Glasses for Visible Red Emission Applications".**

16. **National workshop** on ***"Recent trends in Device materials (RTDM-2013)"*** held on **8-10th November 2013** at NIT Warangal, Warangal, A.P, India.

17. **International workshop** on ***"Role of Material Science in Engineering & Medicine"*** held on **1st & 2nd October 2013** at Krishna Teja Technical Campus, Tirupathi, A.P, India.

18. **National conference** on ***"Recent trends in Nano Science and Technology for Device Applications (RNTDA-2013)"*** held on **4th &-5th April 2013** at K L University Vijayawada, A.P, India and presented a paper entitled "**spectroscopic properties of Ho^{3+} doped Zinc Alumino Bismuth Borate glasses".**

19. **International conference** on **"*Nano Science and Nano Technology (ICONN 2013)*"** held on **18-20th March 2013** at **SRM** University, Kattankulathur , Chennai, A.P, India..

20. **National seminar** on ***"Multi Functional materials (NSMFM-2013)"*** held on **6th and 7th March 2013** at Andhra Loyola College (Autonomous), Vijayawada, A.P, India and presented a paper entitled "**spectroscopic properties of Pr^{3+} doped Zinc Alumino Bismuth Borate glasses".**

21. **National seminar** on ***"Multi Functional materials (NSMFM-2013)"*** held on **6th and 7th March 2013** at Andhra Loyola College (Autonomous), Vijayawada, A.P and presented a paper entitled **"Visible Luminescence characteristics of Sm^{3+} doped Zinc Alumino Bismuth Borate glasses".**

22. **National seminar** on ***"Multi Functional materials (NSMFM-2013)"*** held on **6th and 7th March 2013** at Andhra Loyola College (Autonomous), Vijayawada, A.P and presented a paper entitled **"Photo-Luminescence properties of Pr^{3+} doped Fluoro Tungstunate Tellurite glasses".**

23. **National conference** on ***"Luminescence and its application (NCLA 2013)"*** held on **8-10th January 2013** at PES Institute of technology, Bangalore and presented a paper entitled **"concentration dependence of spectroscopic properties of Nd^{3+} doped Zinc Alumino Bismuth Borate glasses".**

24. **National work shop** on **"*Alternative energies – A thrust on solar thermal & photo voltaic*"** held on **28th December 2012** at K L University, Vaddeswaram, and A.P.

25. **National workshop** on ***"Luminescence Materials Devices and Applications"*** held on **26-27th November 2012** at the M S University of Baroda, Vadodara.

26. **National workshop** on ***"Nano Science & Technology for Device Applications"*** held on **31st of October 2011** at K L University, Guntur, A.P.

27. **The course** on ***"Effective Teaching as a part of the 2010 Indo-US Engineering Faculty Leadership Institute"*** on 7-9th July 2010 at K L University, Vaddeswaram, Guntur (Dt.), A.P.

28. **National seminar** on ***"Physics Curriculum & Text books of +2 level"*** held on **1st March 2009** at The Bapatla College of Arts & Sciences, Bapatla, A.P.

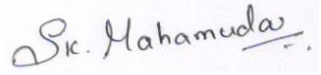
29. **National seminar** on ***"Display Phosphors and Applications"*** held on **10th and 11th November, 2008** at Saveetha Engineering College, Thandalum, and Chennai.

30. **National Seminar** on ***"Emerging Trends in Physics Education and Experimental Physics (NSPE-2006)"*** held on 27th & 28th October 2006 at V.S.R & N.V.R College, Tenali, Guntur (Dt.), A.P.

31. **National Seminar** on ***"The Impact of Physics on Modern Civilization"*** held on 23rd & 24th June 2005 at J.M.J College for Women, Tenali, Guntur (Dt.), A.P.

REFERENCES

S. No.	Name & Designation	Contact Number
1	**Dr. A. Srinivasa Rao** Associate Professor Department of Applied Physics D T U, New Delhi	**085860 39007** Mail ID: drsrallam@gmail.com
2	**Dr. G. Vijay Prakash** Associate Professor Indian Institute of Technology- Delhi Hauz Khas, New Delhi-110016	**09818659298** Mail ID: prakash@physics.iitd.ac.in
3	**Dr. B. Subbarao** Department of Physics V.S.R & N.V.R College Tenali, Guntur (Dt.) Andhra Pradesh	**090306 16461** **Mail ID:**bezawadasubbarao1@gmail.com



(Dr. Mahamuda Shaik)